

In the Claims:

Please cancel claims 1-20 and 25-26. Please amend claims 22-23, 27-31, and 36. The claims are as follows:

1-20. (Canceled)

21. (Previously presented) A method of forming a conductive path within a laminate, comprising:

providing an opening in the laminate;

pressing a conductive element into the opening such that a portion of at least one end of the conductive element extends beyond a surface of the laminate; and

applying a compressive pressure to the portion of the at least one end of the conductive element, wherein the compressive pressure applied to the portion of the at least one end of the conductive element forms a contact pad extending beyond the surface of the laminate, and wherein the conductive element includes an inner element covered by an outer element.

22. (Currently amended) The method of claim 21, wherein the opening is a hole a width of the formed contact pad in a direction parallel to the surface of the laminate exceeds a width of the conductive element in the direction.

23. (Currently amended) The method of claim 21 A method of forming a conductive path within a laminate, comprising:

providing an opening in the laminate;

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pressing a conductive element into the opening such that a portion of at least one end of the conductive element extends beyond a surface of the laminate; and
applying a compressive pressure to the portion of the at least one end of the conductive element, wherein the compressive pressure applied to the portion of the at least one end of the conductive element forms a contact pad extending beyond the surface of the laminate, and
wherein the conductive element includes an inner element covered by an outer element, wherein the conductive element is a sphere.

24. (Original) The method of claim 21, wherein the conductive element is a cylinder.

25-26. (Canceled)

27. (Currently amended) A structure for interconnection between circuit layers, comprising:

~~a laminate having a conductive inner plane;~~

a conductive pad on a surface of the laminate, wherein a bottom surface of the conductive pad is in direct mechanical contact with the surface of the laminate; and

a conductive element having consisting of a lower portion and an upper portion, wherein the lower portion of the conductive element is embedded into the laminate, wherein the upper portion of the conductive element extends above the surface of the laminate, wherein the conductive pad circumscribes the upper portion of the conductive element, wherein the conductive element electrically connects the conductive inner plane to the surface of the

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laminate, wherein the lower portion of the conductive element comprises a conductive material, and wherein the upper portion of the conductive element comprises the conductive material, and wherein the conductive material is continuously distributed from the upper portion of the conductive element to the lower portion of the conductive element and throughout the conductive element.

28. (Currently amended) The structure of claim 27, ~~further including an opening in the laminate that the conductive element is pressed into~~ wherein the laminate comprises a conductive inner plane.

29. (Currently amended) The structure of claim 27 A structure for interconnection between circuit layers, comprising:

a laminate having a conductive inner plane;

a conductive pad on a surface of the laminate, wherein a bottom surface of the conductive pad is in direct mechanical contact with the surface of the laminate;

a conductive element having a lower portion and an upper portion, wherein the lower portion of the conductive element is embedded into the laminate, wherein the upper portion of the conductive element extends above the surface of the laminate, wherein the conductive pad circumscribes the upper portion of the conductive element, wherein the conductive element electrically connects the conductive inner plane to the surface of the laminate, wherein the lower portion of the conductive element comprises a conductive material, and wherein the upper

portion of the conductive element comprises the conductive material, wherein a top surface of the conductive pad is coplanar with a top surface of the upper portion of the conductive element.

30. (Currently amended) ~~The structure of claim 27~~ A structure for interconnection between circuit layers, comprising:

a laminate having a conductive inner plane;

a conductive pad on a surface of the laminate, wherein a bottom surface of the conductive pad is in direct mechanical contact with the surface of the laminate;

a conductive element having a lower portion and an upper portion, wherein the lower portion of the conductive element is embedded into the laminate, wherein the upper portion of the conductive element extends above the surface of the laminate, wherein the conductive pad circumscribes the upper portion of the conductive element, wherein the conductive element electrically connects the conductive inner plane to the surface of the laminate, wherein the lower portion of the conductive element comprises a conductive material, and wherein the upper portion of the conductive element comprises the conductive material, wherein part of the upper portion of the conductive element extends above the conductive pad.

31. (Currently amended) The structure of claim 27, wherein the conductive material is selected from the group consisting of: gold, copper, brass, and bronze.

32. (Previously presented) The structure of claim 30, wherein the part of the upper portion of the conductive element that extends above the conductive pad is on, and in direct mechanical contact with, a top surface of the conductive pad.

33-34. (Canceled)

35. (Previously presented) The structure of claim 30, wherein the part of the upper portion of the conductive element that extends above the conductive pad is not on a top surface of the conductive pad.

36. (Currently amended) A method of forming a conductive path within a laminate, comprising:
providing an opening in the laminate;
pressing a conductive element into the opening such that a portion of at least one end of the conductive element extends beyond a surface of the laminate; and
applying a compressive pressure to the portion of the at least one end of the conductive element, wherein the compressive pressure applied to the portion of the at least one end of the conductive element forms a contact pad extending beyond a surface of the laminate, wherein a width of the formed contact pad in a direction parallel to the surface of the laminate exceeds a width of the conductive element in the direction.

37. (Previously presented) A structure for interconnection between circuit layers, comprising:
a first laminate having a first conductive element embedded into the first laminate

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wherein a portion of the first conductive element forms at least one contact pad extending beyond a surface of the first laminate;

a second laminate having a second conductive element embedded into the second laminate wherein a portion of the second conductive element forms at least one contact pad extending beyond a surface of the second laminate; and

a bonding layer between the first and second laminates such that the contact pads of the first and second conductive elements are electrically connected, wherein the bonding layer comprises conductive metal filled epoxy.

38. (Previously presented) A method of forming a conductive path within a laminate, comprising the steps of:

providing a conductive element;

projecting the conductive element toward a surface of the laminate;

impacting the surface of the laminate by the conductive element, wherein said impacting forms a hole in the laminate such that the entire conductive element provided in the providing step becomes embedded within the hole.

39. (Previously presented) The method of claim 38, wherein the conductive element is a sphere.

40. (Canceled)